

**Flood Control Project Maintenance
Levee Inspections**

Fall 2013 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

| ST0012 | Overall LMA Rating | Total LMA Miles | | | | | | |
|---|------------------------|------------------|--------------|-------------|-------------|---------|------------------------------|---------|
| Sacramento Maintenance Yard Willow Slough Bypass | A | 12.46 | | | | | | |
| Rated Item | Maintenance Deficiency | | | | Enforcement | | Design & System Obsolescence | |
| | M Miles | U Miles | M + 4U Miles | Threshold % | M Miles | U Miles | M Miles | U Miles |
| <i>Earthen Levee</i> | | | | | | | | |
| Vegetation | | | | | 0.13 | | | |
| Encroachments | | | | | 0.32 | | | |
| Erosion / Bank Caving | 0.02 | | 0.02 | 0.16% | | | | |
| Cracking | | | | | | | 0.14 | |
| <i>Supplemental</i> | | | | | | | | |
| DWR UCIP Field Study | | | | | 0.17 | 0.01 | | |
| <i>LMA Totals:</i> | 0.02 | 0.00 | 0.02 | 0.16% | 0.62 | 0.01 | 0.14 | 0.00 |
| Unit No. 01 Willow Slough Bypass or North Levee LB | Overall Unit Rating | Total Unit Miles | | | | | | |
| ST0012 | A | 5.09 | | | | | | |
| Rated Item | Maintenance Deficiency | | | | Enforcement | | Design & System Obsolescence | |
| | M Miles | U Miles | M + 4U Miles | Threshold % | M Miles | U Miles | M Miles | U Miles |
| <i>Earthen Levee</i> | | | | | | | | |
| Vegetation | | | | | 0.13 | | | |
| Encroachments | | | | | 0.31 | | | |
| Cracking | | | | | | | 0.14 | |
| <i>Supplemental</i> | | | | | | | | |
| DWR UCIP Field Study | | | | | 0.11 | 0.01 | | |
| <i>Unit Totals:</i> | 0.00 | 0.00 | 0.00 | 0.00% | 0.55 | 0.01 | 0.14 | 0.00 |
| Unit No. 02 Willow Slough Bypass or South Levee RB | Overall Unit Rating | Total Unit Miles | | | | | | |
| ST0012 | A | 7.37 | | | | | | |
| Rated Item | Maintenance Deficiency | | | | Enforcement | | Design & System Obsolescence | |
| | M Miles | U Miles | M + 4U Miles | Threshold % | M Miles | U Miles | M Miles | U Miles |
| <i>Earthen Levee</i> | | | | | | | | |
| Encroachments | | | | | 0.01 | | | |
| Erosion / Bank Caving | 0.02 | | 0.02 | 0.27% | | | | |
| <i>Supplemental</i> | | | | | | | | |
| DWR UCIP Field Study | | | | | 0.06 | | | |
| <i>Unit Totals:</i> | 0.02 | 0.00 | 0.02 | 0.27% | 0.07 | 0.00 | 0.00 | 0.00 |

**Flood Control Project Maintenance
Levee Inspections****LMA District Cover Sheet
Fall 2013 Levee Inspection Results****Sacramento Maintenance Yard Willow Slough Bypass**

| | Spring (March - May) | Summer ** (June - August) | Fall (September - November) | Winter ** (December - February) |
|----------------------------------|-------------------------|------------------------------|--------------------------------|------------------------------------|
| * Overall LMA Rating (Fall Only) | | | A | |

** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating.

*
SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments

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**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2013 Levee Inspection Results

Sacramento Maintenance Yard Willow Slough Bypass

| Waterway | | | Bank | Unit Miles |
|---|---|---------------------------|---|---------------------------------|
| Unit No. 01 Willow Slough Bypass or North Levee | | | Left | 5.09 |
| | Spring (March - May) | Summer (June - August) | (September - November) Fall | Winter (December - February) |
| Unit Maintenance Rating (Fall Only) | | | A | |
| Date of Inspection | - | | 11/07/2013 - 11/07/2013 | |
| DWR Inspector | John Williamson | | John Williamson | |
| Accompanied By | Casey Lund Sacramento Maintenance Yard | | Casey Lund Sacramento Maintenance Yard | |

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sacramento Maintenance Yard Willow Slough Bypass

| Waterway | | | | | | | Bank | Unit Miles | Inspection Start/End | Inspector | |
|---|------------|------|---------------|----------------------------------|------------|-------------------------|--|---------------------------------|------------------------------|--------------------|--|
| Unit No. 01 Willow Slough Bypass or North Levee | | | | | | | Left | 5.09 | 11/07/2013 11/07/2013 | John Williamson | |
| LMR No. | Levee Mile | | Category | Item | * Location | Rating + + + + Ma | Action/Comment | GPS Latitude/Longitude | | Issue No. | |
| | Start | End | | | | | | Start | End | Photo | |
| 1 | | | Earthen Levee | Operations & Maintenance Manuals | LS | A Ma | | ° | ° | 6 | |
| | | | | | | | | ° | ° | | |
| DWR ID: DWR_ST0012_01_s_2013_6 | | | | | | | | | | | |
| 2 | | | Earthen Levee | Emergency Supplies & Equipment | LS | A Ma | | ° | ° | 7 | |
| | | | | | | | | ° | ° | | |
| DWR ID: DWR_ST0012_01_s_2013_7 | | | | | | | | | | | |
| 3 | | | Earthen Levee | Flood Preparedness & Training | LS | A Ma | | ° | ° | 8 | |
| | | | | | | | | ° | ° | | |
| DWR ID: DWR_ST0012_01_s_2013_8 | | | | | | | | | | | |
| 4 | 0.00 | 0.00 | Supplemental | DWR UCIP Field Study | LS | M En | Inspector Comments: FS_ID:6118 EP_NO: 10130 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Minor debris blocking flap gate. Debris/log needs to be removed from the outlet. FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee 18.0 feet below the crown, flap gate on waterward end. Originally included in O+M manual (1952). FS Date: 9/19/2012 | 38.590766 ° -121.665560 ° | 38.590766 ° -121.665560 ° | 2 Y | |
| | | | | | | | | DWR ID: DWR_ST0012_01_f_2013_2 | | | |
| 5 | 0.00 | 0.00 | Supplemental | DWR UCIP Field Study | LS | U En | Inspector Comments: FS_ID:6101 EP_NO: 10130 Repair Type: Urgent Crossing Status: Found UCIP Comments: Minor debris blocking flap gate. Debris/log needs to be removed from the outlet. FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through the levee 18.0 feet below the crown, flap gate on waterward end. Originally included in O+M manual (1952). FS Date: 9/19/2012 | 38.590766 ° -121.665558 ° | 38.590766 ° -121.665558 ° | 11 Y | |
| | | | | | | | | DWR ID: DWR_ST0012_01_f_2013_11 | | | |
| 6 | 0.02 | 0.15 | Earthen Levee | Vegetation | CR | M En | V6 : Landscaping Inspector Comments: This is the treatment plant's landscaping and chain link fence. | 38.590742 ° -121.665767 ° | 38.590716 ° -121.668203 ° | 1 Y | |
| | | | | | | | | DWR ID: DWR_ST0012_01_s_2012_1 | | | |
| 7 | 0.07 | 0.21 | Earthen Levee | Cracking | WS | M Ob | CR1 : Monitor and have inspected by geotechnical engineer. | 38.590724 ° -121.666749 ° | 38.590663 ° -121.669190 ° | 10 Y | |
| | | | | | | | | DWR ID: DWR_ST0012_01_f_2012_10 | | | |
| 8 | 0.67 | 5.04 | Earthen Levee | Vegetation | WS | A Ma | V1 : Control annual grass and weeds on the levee slopes and easements. | 38.590505 ° -121.677663 ° | 38.600002 ° -121.752677 ° | 3 Y | |
| | | | | | | | | DWR ID: DWR_ST0012_01_s_2012_3 | | | |
| 9 | 0.67 | 5.04 | Earthen Levee | Vegetation | LS | A Ma | V1 : Control annual grass and weeds on the levee slopes and easements. | 38.590502 ° -121.677667 ° | 38.600002 ° -121.752660 ° | 5 Y | |
| | | | | | | | | DWR ID: DWR_ST0012_01_s_2012_5 | | | |

| * Location | ** Rating | + Issue Type |
|-----------------|---|-----------------------------------|
| LS : Land Side | A : Acceptable | Ma : Maintenance Deficiency |
| WS : Water Side | M : Minimally Acceptable | Ob : Design & System Obsolescence |
| CR : Crown | U : Unacceptable | En : Enforcement |
| | N : Not Inspected/Rated | |
| | C : Corrected | |
| | A/W : Acceptable but Monitor & Maintain | |

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sacramento Maintenance Yard Willow Slough Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---|------|------------|--------------------------|--------------------|
| Unit No. 01 Willow Slough Bypass or North Levee | Left | 5.09 | 11/07/2013 11/07/2013 | John Williamson |

| LMR No. | Levee Mile | | Category | Item | Location * | Rating ** + | Action/Comment | GPS Latitude/Longitude | | Issue No. Photo |
|---------|------------|-----|----------|------|---------------|-------------------|----------------|------------------------|-----|--------------------|
| | Start | End | | | | | | Start | End | |

| | | | | | | | | | | |
|----|------|------|--------------|-------------------------|----|---------|---|------------------------------|------------------------------|---------|
| 10 | 1.13 | 1.13 | Supplemental | DWR UCIP Field Study | LS | M En | Inspector Comments: FS_ID:6120 EP_NO: 9253A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Damaged flap gate found in outlet pond on WS. FIELD_STRUCT_DESC: 24-inch C.M. drainpipe through the levee, 18 feet below the crown. Flap gate on the waterward end, 48-inch standpipe on the waterward shoulder. (App. No. 9253-A - Yolo County) FS Date: 9/19/2012 | 38.590340 ° -121.686070 ° | 38.590340 ° -121.686070 ° | 12 Y |
|----|------|------|--------------|-------------------------|----|---------|---|------------------------------|------------------------------|---------|

DWR ID: DWR_ST0012_01_f_2013_12

| | | | | | | | | | | |
|----|------|------|--------------|-------------------------|----|---------|---|------------------------------|------------------------------|---------|
| 11 | 2.02 | 2.02 | Supplemental | DWR UCIP Field Study | LS | M En | Inspector Comments: FS_ID:6142 EP_NO: 10307 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: The 48-inch concrete manhole damaged - top ring knocked off in waterside. Debris found in waterside pipe. FIELD_STRUCT_DESC: 24-inch pipe through the levee, 10.0 feet below the crown. Flap gate on the waterward end. Concrete headwall on both ends. Slide gate in 48-inch manhole on WS slope. (A.B.O. No. 10307 - Beckman). O&M manual 120, revision Dec 2010. FS Date: 9/19/2012 | 38.590390 ° -121.702470 ° | 38.590390 ° -121.702470 ° | 13 Y |
|----|------|------|--------------|-------------------------|----|---------|---|------------------------------|------------------------------|---------|

DWR ID: DWR_ST0012_01_f_2013_13

| | | | | | | | | | | |
|----|------|------|--------------|-------------------------|----|---------|---|------------------------------|------------------------------|---------|
| 12 | 2.02 | 2.02 | Supplemental | DWR UCIP Field Study | LS | M En | Inspector Comments: FS_ID:6264 EP_NO: 10307 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: The 48-inch concrete manhole damaged - top ring knocked off in waterside. Debris found in waterside pipe. FIELD_STRUCT_DESC: 24-inch pipe through the levee, 10.0 feet below the crown. Flap gate on the waterward end. Concrete headwall on both ends. Slide gate in 48-inch manhole on WS slope. (A.B.O. No. 10307 - Beckman). O&M manual 120, revision Dec 2010. FS Date: 9/19/2012 | 38.590390 ° -121.702470 ° | 38.590390 ° -121.702470 ° | 14 Y |
|----|------|------|--------------|-------------------------|----|---------|---|------------------------------|------------------------------|---------|

DWR ID: DWR_ST0012_01_f_2013_14

| | | |
|--|---|---|
| * Location LS : Land Side WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|---|---|

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sacramento Maintenance Yard Willow Slough Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---|------|------------|--------------------------|--------------------|
| Unit No. 01 Willow Slough Bypass or North Levee | Left | 5.09 | 11/07/2013 11/07/2013 | John Williamson |

| LMR No. | Levee Mile | | Category | Item | Location | Rating | Action/Comment | GPS Latitude/Longitude | | Issue No. Photo |
|---------|------------|-----|----------|------|----------|--------|----------------|------------------------|-----|--------------------|
| | Start | End | | | | | | Start | End | |

| | | | | | | | | | | |
|----|------|------|--------------|-------------------------|----|---------|---|------------------------------|------------------------------|----|
| 13 | 2.02 | 2.02 | Supplemental | DWR UCIP Field Study | LS | M En | Inspector Comments: FS_ID:13953 EP_NO: 10307 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: flap gate cleaned and standpipe repaired FIELD_STRUCT_DESC: 24-inch pipe through the levee, 10.0 feet below the crown. Flap gate on the waterward end. Concrete headwall on both ends. Slide gate in 48-inch manhole on WS slope. (A.B.O. No. 10307 - Beckman). O&M manual 120, revision Dec 2010. FS Date: 5/28/2013 | 38.590390 ° -121.702470 ° | 38.590390 ° -121.702470 ° | 15 |
|----|------|------|--------------|-------------------------|----|---------|---|------------------------------|------------------------------|----|

DWR ID: DWR_ST0012_01_f_2013_15

| | | | | | | | | | | |
|----|------|------|--------------|-------------------------|----|---------|---|------------------------------|------------------------------|---------|
| 14 | 2.02 | 2.02 | Supplemental | DWR UCIP Field Study | LS | M En | Inspector Comments: FS_ID:6144 EP_NO: 9253A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Needs vegetation removal on landside of the levee. FIELD_STRUCT_DESC: A 20-inch pipe sleeved through 30-inch pipe and angular space grouted, through the levee, 9.0 feet below the crown. Slide gate on the waterward slope in 48-inch standpipe. Concrete headwall on both ends. Flap gate in the waterward headwall. (App. No. 9253-A - Yolo County) FS Date: 9/19/2012 | 38.590390 ° -121.702540 ° | 38.590390 ° -121.702540 ° | 16 Y |
|----|------|------|--------------|-------------------------|----|---------|---|------------------------------|------------------------------|---------|

DWR ID: DWR_ST0012_01_f_2013_16

| | | | | | | | | | | |
|----|------|------|--------------|-------------------------|----|---------|--|------------------------------|------------------------------|---------|
| 15 | 2.93 | 2.93 | Supplemental | DWR UCIP Field Study | LS | M En | Inspector Comments: FS_ID:6160 EP_NO: 10311 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Vegetation removal on landside of the levee. FIELD_STRUCT_DESC: 24-inch CM pipe through the levee, 10.0 feet below the crown. Flap gate on the waterward end. (A.B.O. No. 10311 - Ittner and Harlan). O&M manual 120, revision Dec 2010. FS Date: 9/19/2012 | 38.590580 ° -121.719220 ° | 38.590580 ° -121.719220 ° | 17 Y |
|----|------|------|--------------|-------------------------|----|---------|--|------------------------------|------------------------------|---------|

DWR ID: DWR_ST0012_01_f_2013_17

| | | | | | | | | | | |
|----|------|------|--------------|-------------------------|----|---------|--|------------------------------|------------------------------|---------|
| 16 | 3.56 | 3.56 | Supplemental | DWR UCIP Field Study | LS | M En | Inspector Comments: FS_ID:6165 EP_NO: 10316 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Debris on waterside flap gate. Needs debris removal from the pipe. FIELD_STRUCT_DESC: 24-inch CM drainpipe through the levee, 11.0 feet below the crown. Flap gate on the waterward end. Waterside pipe sits on concrete saddle. (A.B.O. No. 10316 - Stafford). O&M manual 120, revision Dec 2010. FS Date: 9/19/2012 | 38.590680 ° -121.730720 ° | 38.590680 ° -121.730720 ° | 18 Y |
|----|------|------|--------------|-------------------------|----|---------|--|------------------------------|------------------------------|---------|

DWR ID: DWR_ST0012_01_f_2013_18

| | | | |
|--|--|---|---|
| * Location LS : Land Side WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|--|---|---|

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sacramento Maintenance Yard Willow Slough Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---|------|------------|--------------------------|--------------------|
| Unit No. 01 Willow Slough Bypass or North Levee | Left | 5.09 | 11/07/2013 11/07/2013 | John Williamson |

| LMR No. | Levee Mile | | Category | Item | Location | Rating | Action/Comment | GPS Latitude/Longitude | | Issue No. |
|---------------------------------|------------|------|---------------|----------------------|----------|---------|---|------------------------------|------------------------------|-----------|
| | Start | End | | | | | | Start | End | |
| 17 | 4.32 | 4.32 | Supplemental | DWR UCIP Field Study | LS | M En | Inspector Comments: FS_ID:13968 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: PG&E may provide further info FIELD_STRUCT_DESC: 8-inch gas main pipeline through both levees.(PG&E). O&M manual 120, revision Dec 2010. FS Date: 5/28/2013 2:36:00 PM | 38.598840 ° -121.739600 ° | 38.598840 ° -121.739600 ° | 19 |
| DWR ID: DWR_ST0012_01_f_2013_19 | | | | | | | | | | |
| 18 | 4.32 | 4.63 | Earthen Levee | Encroachments | LS | M En | DT : Ditch | 38.598876 ° -121.739640 ° | 38.599845 ° -121.745007 ° | 4 Y |
| DWR ID: DWR_ST0012_01_s_2012_4 | | | | | | | | | | |
| 19 | 5.09 | 5.09 | Supplemental | DWR UCIP Field Study | LS | M En | Inspector Comments: FS_ID:13969 EP_NO: 15811 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: FIELD_STRUCT_DESC: Replace existing 4-inch diameter natural gas pipeline with an 8-inch diameter natural gas pipeline under the channel and within both banks of Willow Slough. Application No. 15811. FS Date: 5/28/2013 2:38:30 PM | 38.599940 ° -121.753530 ° | 38.599940 ° -121.753530 ° | 20 |
| DWR ID: DWR_ST0012_01_f_2013_20 | | | | | | | | | | |
| 20 | 5.09 | 5.09 | Supplemental | DWR UCIP Field Study | LS | M En | Inspector Comments: FS_ID:13967 EP_NO: 15811 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: FIELD_STRUCT_DESC: Replace existing 4-inch diameter natural gas pipeline with an 8-inch diameter natural gas pipeline under the channel and within both banks of Willow Slough. Application No. 15811. FS Date: 9/19/2012 | 38.599940 ° -121.753530 ° | 38.599940 ° -121.753530 ° | 21 |
| DWR ID: DWR_ST0012_01_f_2013_21 | | | | | | | | | | |

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sacramento Maintenance Yard Willow Slough Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---|------|------------|--------------------------|--------------------|
| Unit No. 01 Willow Slough Bypass or North Levee | Left | 5.09 | 11/07/2013 11/07/2013 | John Williamson |

| | |
|------------------------|----------------------|
| Levee Mile Report Line | 4 |
| Start Levee Mile | 0.00 |
| End Levee Mile | 0.00 |
| Location | Water Side |
| Category | Supplemental |
| Item | DWR UCIP Field Study |

Waterside view- pipe view from levee crown.

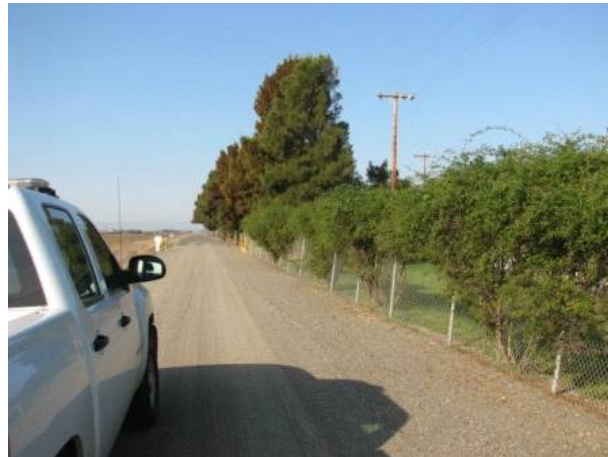
UCIP_2734.jpg



| | |
|------------------------|---------------|
| Levee Mile Report Line | 6 |
| Start Levee Mile | 0.02 |
| End Levee Mile | 0.15 |
| Location | Crown |
| Category | Earthen Levee |
| Item | Vegetation |

The treatment plant's landscape and fence. This runs along the crown and toe of the levee.

johngw_f_20131021_817.jpg



| | |
|------------------------|---------------|
| Levee Mile Report Line | 6 |
| Start Levee Mile | 0.02 |
| End Levee Mile | 0.15 |
| Location | Crown |
| Category | Earthen Levee |
| Item | Vegetation |

Photo taken spring 2012, the treatment plants landscaping.

johngw_f_20131021_818.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sacramento Maintenance Yard Willow Slough Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---|------|------------|--------------------------|--------------------|
| Unit No. 01 Willow Slough Bypass or North Levee | Left | 5.09 | 11/07/2013 11/07/2013 | John Williamson |

| | |
|------------------------|---------------|
| Levee Mile Report Line | 7 |
| Start Levee Mile | 0.07 |
| End Levee Mile | 0.21 |
| Location | Water Side |
| Category | Earthen Levee |
| Item | Cracking |

There is still cracking sloughing on the waterside crown. Attempts to fill in the cracks all along the roadway have been done.

johngw_f_20131021_825.jpg



| | |
|------------------------|---------------|
| Levee Mile Report Line | 8 |
| Start Levee Mile | 0.67 |
| End Levee Mile | 5.04 |
| Location | Water Side |
| Category | Earthen Levee |
| Item | Vegetation |

The levee has no unwanted vegetation on the slope. Fall 2013

johngw_f_20131112_316.JPG



| | |
|------------------------|---------------|
| Levee Mile Report Line | 9 |
| Start Levee Mile | 0.67 |
| End Levee Mile | 5.04 |
| Location | Land Side |
| Category | Earthen Levee |
| Item | Vegetation |

The levee has no unwanted vegetation on the slope. Fall 2013

johngw_f_20131112_315.JPG



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sacramento Maintenance Yard Willow Slough Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---|------|------------|--------------------------|--------------------|
| Unit No. 01 Willow Slough Bypass or North Levee | Left | 5.09 | 11/07/2013 11/07/2013 | John Williamson |

| | |
|------------------------|----------------------|
| Levee Mile Report Line | 10 |
| Start Levee Mile | 1.13 |
| End Levee Mile | 1.13 |
| Location | Land Side |
| Category | Supplemental |
| Item | DWR UCIP Field Study |

Waterside overview

UCIP_2737.jpg



| | |
|------------------------|----------------------|
| Levee Mile Report Line | 12 |
| Start Levee Mile | 2.02 |
| End Levee Mile | 2.02 |
| Location | Land Side |
| Category | Supplemental |
| Item | DWR UCIP Field Study |

Landside view- concrete pipe and headwall.

UCIP_2774.jpg



| | |
|------------------------|----------------------|
| Levee Mile Report Line | 14 |
| Start Levee Mile | 2.02 |
| End Levee Mile | 2.02 |
| Location | Land Side |
| Category | Supplemental |
| Item | DWR UCIP Field Study |

Waterside view- pipe was working during field survey. Pipe and flap gate.

UCIP_2749.jpg



| | | |
|--|---|---|
| * Location LS : Land Side WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|---|---|

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sacramento Maintenance Yard Willow Slough Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---|------|------------|--------------------------|--------------------|
| Unit No. 01 Willow Slough Bypass or North Levee | Left | 5.09 | 11/07/2013 11/07/2013 | John Williamson |

| | |
|------------------------|----------------------|
| Levee Mile Report Line | 15 |
| Start Levee Mile | 2.93 |
| End Levee Mile | 2.93 |
| Location | Land Side |
| Category | Supplemental |
| Item | DWR UCIP Field Study |

Landside view- inlet structure

UCIP_2755.jpg



| | |
|------------------------|----------------------|
| Levee Mile Report Line | 16 |
| Start Levee Mile | 3.56 |
| End Levee Mile | 3.56 |
| Location | Land Side |
| Category | Supplemental |
| Item | DWR UCIP Field Study |

Waterside view- overview

UCIP_2760.jpg



| | |
|------------------------|---------------|
| Levee Mile Report Line | 18 |
| Start Levee Mile | 4.32 |
| End Levee Mile | 4.63 |
| Location | Land Side |
| Category | Earthen Levee |
| Item | Encroachments |

The agricultural ditch runs along the toe of the levee. Fall 2011

johngw_f_20131021_820.jpg



| | | | |
|--|--|---|---|
| * Location LS : Land Side WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|--|---|---|

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2013 Levee Inspection Results

Sacramento Maintenance Yard Willow Slough Bypass

| Waterway | | | Bank | Unit Miles |
|---|---|---------------------------|---|---------------------------------|
| Unit No. 02 Willow Slough Bypass or South Levee | | | Right | 7.37 |
| | Spring (March - May) | Summer (June - August) | (September - November) Fall | Winter (December - February) |
| Unit Maintenance Rating (Fall Only) | | | A | |
| Date of Inspection | - | | 11/07/2013 - 11/07/2013 | |
| DWR Inspector | John Williamson | | John Williamson | |
| Accompanied By | Casey Lund Sacramento Maintenance Yard | | Casey Lund Sacramento Maintenance Yard | |

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sacramento Maintenance Yard Willow Slough Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---|-------|------------|--------------------------|--------------------|
| Unit No. 02 Willow Slough Bypass or South Levee | Right | 7.37 | 11/07/2013 11/07/2013 | John Williamson |

| LMR No. | Levee Mile | | Category | Item | Location | Rating | Action/Comment | GPS Latitude/Longitude | | Issue No. |
|----------------------------------|------------|------|---------------|-----------------------|----------|---------|---|------------------------------|------------------------------|-----------|
| | Start | End | | | | | | Start | End | |
| 1 | 0.00 | 0.00 | Supplemental | DWR UCIP Field Study | WS | M En | Inspector Comments: FS_ID:13863 EP_NO: 15811 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: Need to contact owner of pipe to place indicators on levee FIELD_STRUCT_DESC: Replace existing 4-inch diameter natural gas pipeline with an 8-inch diameter natural gas pipeline under the channel and within both banks of Willow Slough. Application No. 15811. FS Date: 5/24/2013 | 38.599100 ° -121.753260 ° | 38.599100 ° -121.753260 ° | 154 |
| DWR ID: DWR_ST0012_02_f_2013_154 | | | | | | | | | | |
| 2 | 0.02 | 7.37 | Earthen Levee | Vegetation | WS | A Ma | V1 : Control annual grass and weeds on the levee slopes and easements. | 38.599135 ° -121.752906 ° | 38.574631 ° -121.638929 ° | 4 Y |
| DWR ID: DWR_ST0012_02_s_2012_4 | | | | | | | | | | |
| 3 | 0.02 | 7.37 | Earthen Levee | Vegetation | LS | A Ma | V1 : Control annual grass and weeds on the levee slopes and easements. | 38.599135 ° -121.752906 ° | 38.574631 ° -121.638929 ° | 6 Y |
| DWR ID: DWR_ST0012_02_s_2012_6 | | | | | | | | | | |
| 4 | 0.17 | 0.17 | Earthen Levee | Encroachments | LS | M En | DE : Debris | 38.599062 ° -121.750156 ° | 38.599062 ° -121.750156 ° | 160 Y |
| DWR ID: DWR_ST0012_02_f_2013_160 | | | | | | | | | | |
| 5 | 0.77 | 0.77 | Supplemental | DWR UCIP Field Study | LS | M En | Inspector Comments: FS_ID:6181 EP_NO: 10327 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Flap gate is not properly closing. FIELD_STRUCT_DESC: 24-inch CM drainpipe through the levee, 17.5 feet below the crown. Flap gate on the waterward slope. (A.B.O. No. 10327 - Heidrick). O&M manual 120, revision Dec 2010. FS Date: 9/20/2012 | 38.597813 ° -121.739636 ° | 38.597813 ° -121.739636 ° | 155 Y |
| DWR ID: DWR_ST0012_02_f_2013_155 | | | | | | | | | | |
| 6 | 1.71 | 1.71 | Earthen Levee | Erosion / Bank Caving | WS | M Ma | E1 : Note and monitor erosion site. | 38.589966 ° -121.727072 ° | 38.589966 ° -121.727072 ° | 8 Y |
| DWR ID: DWR_ST0012_02_s_2012_8 | | | | | | | | | | |
| 7 | 1.86 | 1.86 | Earthen Levee | Encroachments | WS | A En | PI : Pipe | 38.589923 ° -121.724187 ° | 38.589923 ° -121.724187 ° | 1 Y |
| DWR ID: DWR_ST0012_02_s_2012_1 | | | | | | | | | | |
| 8 | 1.86 | 1.86 | Earthen Levee | Erosion / Bank Caving | WS | C Ma | E1 : Note and monitor erosion site. Inspector Comments: The owner of the pipe has placed two pipes in the channel. This is to pond the water for irrigation. It is possible that this started the erosion of the bank. | 38.589922 ° -121.724185 ° | 38.589922 ° -121.724185 ° | 3 |
| DWR ID: DWR_ST0012_02_s_2012_3 | | | | | | | | | | |
| 9 | 1.97 | 1.97 | Earthen Levee | Erosion / Bank Caving | WS | M Ma | E1 : Note and monitor erosion site. | 38.589906 ° -121.722218 ° | 38.589906 ° -121.722218 ° | 5 Y |
| DWR ID: DWR_ST0012_02_s_2012_5 | | | | | | | | | | |

| | | |
|--|---|---|
| * Location LS : Land Side WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|---|---|

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sacramento Maintenance Yard Willow Slough Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---|-------|------------|--------------------------|--------------------|
| Unit No. 02 Willow Slough Bypass or South Levee | Right | 7.37 | 11/07/2013 11/07/2013 | John Williamson |

| LMR No. | Levee Mile | | Category | Item | Location | Rating | Action/Comment | GPS Latitude/Longitude | | Issue No. |
|----------------------------------|------------|------|---------------|-----------------------|----------|--------|--|------------------------------|------------------------------|-----------|
| | Start | End | | | | | | Start | End | |
| 10 | 2.66 | 2.66 | Earthen Levee | Erosion / Bank Caving | WS | C | E1 : Note and monitor erosion site. Inspector Comments: The erosion is starting to encroach into the toe road. | 38.589714 ° -121.709456 ° | 38.589714 ° -121.709456 ° | 9 |
| DWR ID: DWR_ST0012_02_s_2012_9 | | | | | | | | | | |
| 11 | 2.90 | 2.90 | Earthen Levee | Erosion / Bank Caving | WS | C | E1 : Note and monitor erosion site. Inspector Comments: The site has a discharge pipe and has begun eroding around the pipe. It is also eroding into the toe road. | 38.589707 ° -121.705044 ° | 38.589707 ° -121.705044 ° | 10 |
| DWR ID: DWR_ST0012_02_s_2012_10 | | | | | | | | | | |
| 12 | 3.56 | 3.56 | Earthen Levee | Encroachments | LS | A | BU : Building Inspector Comments: Control structure for Davis Drain, block building. | 38.589657 ° -121.692850 ° | 38.589657 ° -121.692850 ° | 2 Y |
| DWR ID: DWR_ST0012_02_s_2012_2 | | | | | | | | | | |
| 13 | 4.23 | 4.23 | Supplemental | DWR UCIP Field Study | LS | M | Inspector Comments: FS_ID:6193 EP_NO: 10334 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: May need video inspection as seen rodent activities on headwall. FIELD_STRUCT_DESC: 24-inch CM pipe through the levee, 13.5 feet below the crown. Flap gate on the waterward end. (A.B.O. No. 10334 - Rhinehart). O&M manual 120, revision Dec 2010. FS Date: 9/20/2012 | 38.589530 ° -121.680560 ° | 38.589530 ° -121.680560 ° | 156 |
| DWR ID: DWR_ST0012_02_f_2013_156 | | | | | | | | | | |
| 14 | 4.23 | 4.23 | Supplemental | DWR UCIP Field Study | LS | M | Inspector Comments: FS_ID:13876 EP_NO: 10334 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Rodent activities on headwall is far from the levee. Inlet is across city of davis drainage ditch. Inlet was cleaned last fall. see picture FIELD_STRUCT_DESC: 24-inch CM pipe through the levee, 13.5 feet below the crown. Flap gate on the waterward end. (A.B.O. No. 10334 - Rhinehart). O&M manual 120, revision Dec 2010. FS Date: 5/24/2013 | 38.589530 ° -121.680560 ° | 38.589530 ° -121.680560 ° | 157 |
| DWR ID: DWR_ST0012_02_f_2013_157 | | | | | | | | | | |
| 15 | 4.53 | 4.53 | Supplemental | DWR UCIP Field Study | LS | M | Inspector Comments: FS_ID:6194 EP_NO: 10319 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Soil and debris on inlet mouth. FIELD_STRUCT_DESC: 24-inch CM drainpipe through the levee, 15.0 feet below the crown. Flap gate on the waterward end. (A.B.O. No. 10319 - Bell). O&M manual 120, revision Dec 2010. FS Date: 9/20/2012 | 38.589575 ° -121.674950 ° | 38.589575 ° -121.674950 ° | 158 |
| DWR ID: DWR_ST0012_02_f_2013_158 | | | | | | | | | | |

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sacramento Maintenance Yard Willow Slough Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---|-------|------------|--------------------------|--------------------|
| Unit No. 02 Willow Slough Bypass or South Levee | Right | 7.37 | 11/07/2013 11/07/2013 | John Williamson |

| LMR No. | Levee Mile | | Category | Item | Location | Rating | Action/Comment | GPS Latitude/Longitude | | Issue No. Photo |
|---------|------------|------|--------------|-------------------------|----------|---------|---|------------------------------|------------------------------|--------------------|
| | Start | End | | | | | | Start | End | |
| 16 | 4.53 | 4.53 | Supplemental | DWR UCIP Field Study | LS | M En | Inspector Comments: FS_ID:13877 EP_NO: 10319 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Material removed from inlet last fall. Outlet cleared FIELD_STRUCT_DESC: 24-inch CM drainpipe through the levee, 15.0 feet below the crown. Flap gate on the waterward end. (A.B.O. No. 10319 - Bell). O&M manual 120, revision Dec 2010. FS Date: 5/24/2013 | 38.589575 ° -121.674950 ° | 38.589575 ° -121.674950 ° | 159 Y |

DWR ID: DWR_ST0012_02_f_2013_159

| | | |
|--|---|---|
| * Location LS : Land Side WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|---|---|

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sacramento Maintenance Yard Willow Slough Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---|-------|------------|--------------------------|--------------------|
| Unit No. 02 Willow Slough Bypass or South Levee | Right | 7.37 | 11/07/2013 11/07/2013 | John Williamson |

| | |
|------------------------|---------------|
| Levee Mile Report Line | 2 |
| Start Levee Mile | 0.02 |
| End Levee Mile | 7.37 |
| Location | Water Side |
| Category | Earthen Levee |
| Item | Vegetation |

The levee has no unwanted vegetation on the slope. Fall 2013

johngw_f_20131112_317.JPG



| | |
|------------------------|---------------|
| Levee Mile Report Line | 3 |
| Start Levee Mile | 0.02 |
| End Levee Mile | 7.37 |
| Location | Land Side |
| Category | Earthen Levee |
| Item | Vegetation |

The levee has no unwanted vegetation on the slope. Fall 2013

johngw_f_20131112_318.JPG



| | |
|------------------------|---------------|
| Levee Mile Report Line | 4 |
| Start Levee Mile | 0.17 |
| End Levee Mile | 0.17 |
| Location | Land Side |
| Category | Earthen Levee |
| Item | Encroachments |

There is some debris pipe and concrete on the levee slope. Fall 2013

johngw_f_20131112_319.JPG



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sacramento Maintenance Yard Willow Slough Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---|-------|------------|--------------------------|--------------------|
| Unit No. 02 Willow Slough Bypass or South Levee | Right | 7.37 | 11/07/2013 11/07/2013 | John Williamson |

| | |
|------------------------|----------------------|
| Levee Mile Report Line | 5 |
| Start Levee Mile | 0.77 |
| End Levee Mile | 0.77 |
| Location | Water Side |
| Category | Supplemental |
| Item | DWR UCIP Field Study |

Waterside view- CM pipe and flap gate.

UCIP_2777.jpg



| | |
|------------------------|-----------------------|
| Levee Mile Report Line | 6 |
| Start Levee Mile | 1.71 |
| End Levee Mile | 1.71 |
| Location | Water Side |
| Category | Earthen Levee |
| Item | Erosion / Bank Caving |

Erosion on the edge of the channel. Fall 2012

johngw_f_20131021_832.jpg



| | |
|------------------------|---------------|
| Levee Mile Report Line | 7 |
| Start Levee Mile | 1.86 |
| End Levee Mile | 1.86 |
| Location | Water Side |
| Category | Earthen Levee |
| Item | Encroachments |

A pipe crossing thru the levee and blocking toe road. Fall 2011

johngw_f_20131021_826.jpg



| | | | |
|--|--|---|---|
| * Location LS : Land Side WS : Water Side CR : Crown | ** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement |
|--|--|---|---|

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sacramento Maintenance Yard Willow Slough Bypass

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---|-------|------------|--------------------------|--------------------|
| Unit No. 02 Willow Slough Bypass or South Levee | Right | 7.37 | 11/07/2013 11/07/2013 | John Williamson |

| | |
|------------------------|-----------------------|
| Levee Mile Report Line | 9 |
| Start Levee Mile | 1.97 |
| End Levee Mile | 1.97 |
| Location | Water Side |
| Category | Earthen Levee |
| Item | Erosion / Bank Caving |

Erosion on the edge of the channel. Fall 2012.

johngw_f_20131021_830.jpg



| | |
|------------------------|---------------|
| Levee Mile Report Line | 12 |
| Start Levee Mile | 3.56 |
| End Levee Mile | 3.56 |
| Location | Land Side |
| Category | Earthen Levee |
| Item | Encroachments |

A control structure is placed on top of the levee. Fall 2011

johngw_f_20131021_827.jpg



| | |
|------------------------|----------------------|
| Levee Mile Report Line | 16 |
| Start Levee Mile | 4.53 |
| End Levee Mile | 4.53 |
| Location | Land Side |
| Category | Supplemental |
| Item | DWR UCIP Field Study |

Waterside view- pipe and flap gate.

UCIP_7471.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement